WHAT IS CLAIMED IS:

1. A method comprising:

directing light from an image onto a mask;

switching a first area of the mask to an optically-conductive state;

switching a remaining area of the mask to an optically-blocking state;

sampling light passing through the first area of the mask by a photosensitive element;

switching the first area to an optically-blocking state;

switching the remaining area to an optically-conductive state; and

sampling light passing through the remaining area by the photosensitive element.

2. The method according to claim 1, wherein switching the first area to an optically-conductive state further comprises switching the first area to an optically-conductive state for a sampling period of the photosensitive element.

3. The method according to claim 1, wherein switching the remaining area to an optically-conductive state comprises sequentially switching a plurality of areas in the remaining area of the mask to respective optically-blocking and optically-conductive states.

4. The method according to claim 1, wherein sampling light by the photosensitive element passing through the first area comprises sampling light by a charge-coupled device.

5. The method according to claim 1, wherein sampling light by the photosensitive element passing through the remaining area comprises sampling light by a charge-coupled device.

6. The method according to claim 1, wherein directing light onto a mask comprises directing light onto a pockel cell modulator.

7. The method according to claim 1, wherein sampling light passing through the first area comprises generating, by the photosensitive element, a data set representative of light intensity passed through the first area of the mask.

8. The method according to claim 1, wherein sampling light passing through the remaining area further comprises generating, by the photosensitive element, a data set representative of light intensity passed through the remaining areas of the mask.

9. An assemblage for sampling an image, comprising:

a photosensitive element operable to convert light into an electrical signal; and

a mask having a plurality of mask cells, each mask cell having an optically-conductive state and an optically-blocking state, a mask cell in an optically-conductive state permitting light to pass through to the photosensitive element.

10. The assemblage according to claim 9, wherein the plurality of mask cells in a mask are each sequentially switched to an optically-conductive state from an optically-blocking state.

11. The assemblage according to claim 10, wherein each of the plurality of mask cells are switched to an optically-conductive state for a pre-defined sample time period of the photosensitive element.

12. The assemblage according to claim 9, wherein the photosensitive element generates a plurality of samples of the image.

13. The assemblage according to claim 9, wherein the mask comprises an array of mask cells.

14. The assemblage according to claim 9, wherein the mask comprises a matrix of mask cells.

15. The assemblage according to claim 9, wherein the mask comprises a plurality of electrically switchable mask cells.

16. An imaging device comprising:

a plurality of photosensitive elements arranged in a linear array; and

a plurality of mask elements, each of the mask elements respectively associated with one of the plurality of photosensitive elements, and each mask element comprising a plurality of mask cells electrically switchable between optically-conductive and optically-blocking states.

17. The imaging device according to claim 16, wherein the mask elements are each configured to sequentially switch one of the plurality of mask cells to an optically-conducive state from an optically blocking state.

18. The imaging device according to claim 16, wherein the plurality of photosensitive elements generates $X \cdot Y$ samples, where X is the number of photosensitive elements and Y is the number of mask cells in each mask element.